

Work Order ID 134396

134396

Page 1

Wednesday, July 08, 2015 3:12:39 PM

Item ID: D212-580-041 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Dual Cargo Mirror Installation
 Start Date: 6/30/15 Start Qty: 2.00 *2* Cust Item ID:
 Required Date: 7/07/15 Req'd Qty: 2.00 *2* Customer:
 Reference:

Approvals: Process Plan: MLS Date: JUL 09 2015 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start *NR1*
 Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2161	B2								
IIN-D212-580-1	B								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile and create labels as per PPP D212-580-041 CHG004								
160	Pick Kit	0.00							
160									
Packaging	Memo	0.00							
Packaging									

MLS 15-18-15
 2X DAS 28 9.00
 NOV 11 2015

OCT 22 2015
 DAS 27 9.00
 DAS 9.00

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER :					

Work Order ID 134396

134396

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Wednesday, July 08, 2015 3:12:40 PM

Item ID: D212-580-041

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Dual Cargo Mirror Installation

Start Date: 6/30/15 Start Qty: 2.00

2

Cust Item ID:

Required Date: 7/07/15 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	QC4- 100% Inspect kits for completeness	0.00							
170									
QC	Memo	0.00				2X	DAS 28 9-89	NOV 1 1 2015	
Quality Control									
180		0.00							
180	Packaging								
Packaging	Memo	0.00				2X	DAS 28 9-89	NOV 1 1 2015	
Packaging	Identify and pack for shipping as per PPP D212--580-041 LOCATION: FG010								
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.00				MCS		NOV 1 2 2015	
Quality Control									

MCS NOV 1 2 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, July 08, 2015 3:12:39 PM

Page 1

Work Order ID: 134396

134396

Parent Item: D212-580-041

D212-580-041

Parent Item Name: Dual Cargo Mirror Installation

Start Date: 6/30/15

Required Date: 7/07/15

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:H Removed D2013-3/-4 06-03-22 JLM
 IPP REV:I AS PER ECN10-611 10-09-07 JLM VERIFIED
 BY:DD IPP rev:J
 10.11.22 AS PER ECN10-642 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3439-101		Manufactured	No			100	Each	25.0000	2	4			
2 *D3439-101* 27 Mirror Assembly 8" 9-89													

DAS
28
9-89

Location

Loc Qty

Loc Code

FG
103697
ST381
115883
125449

2
2
23
3
20

D2161-212		Manufactured	No			100	Each	2.0000	1	2			
2 *D2161-212* 27 Mirror Bracket, 212 9-89													

DAS
28
9-89

Location

Loc Qty

Loc Code

ST194
123308

2
2

OCT 22 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Work Order ID: 134396

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Parent Item: D212-580-041

D212-580-041

Parent Item Name: Dual Cargo Mirror Installation

Start Date: 6/30/15

Required Date: 7/07/15

Start Qty: 2.00

Required Qty: 2.00

MS20426AD3-4

Purchased

No

100

Each

4,049.000

8

16

DAS

27

9-89

MS20426AD3-4

RIVET

DAS
28
9-89

Location

Loc Qty

Loc Code

CA

12

125578

12

GA

3651

m131697

3651

MF4

7

125578

7

ST313

379

m127432

379

16

D4164-041

Manufactured

No

100

Each

58.0000

4

8

DAS

27

OCT 27 2015

D4164-041

Nut Plate Adapter Assembly

DAS
28
9-89

Location

Loc Qty

Loc Code

ST090A

15

129429

15

ST096

43

118921

25

123400

18

8

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____																							
Misidentified ☐	Past Due ☐																								

Picklist Print

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Wednesday, July 08, 2015 3:12:39 PM

Work Order ID: 134396

134396

Parent Item: D212-580-041

D212-580-041

Parent Item Name: Dual Cargo Mirror Installation

Start Date: 6/30/15

Required Date: 7/07/15

Start Qty: 2.00

Required Qty: 2.00

MS27039-1-08

Purchased

No

100

Each

874.0000

4

8

MS27039-1-08

Screw

BAS

27

9-89

DAS

27

9-89

Location

Loc Qty

Loc Code

CA

96

m128636

96

FP001

371

m128636

371

GA

2

125654

2

ST285

405

m128636

405

DAS
28
9-89

OCT 22 2015

Wednesday, July 08, 2015 3:12:39 PM

Shop Packet Print

Page 3

DQA: _____ Date: _____

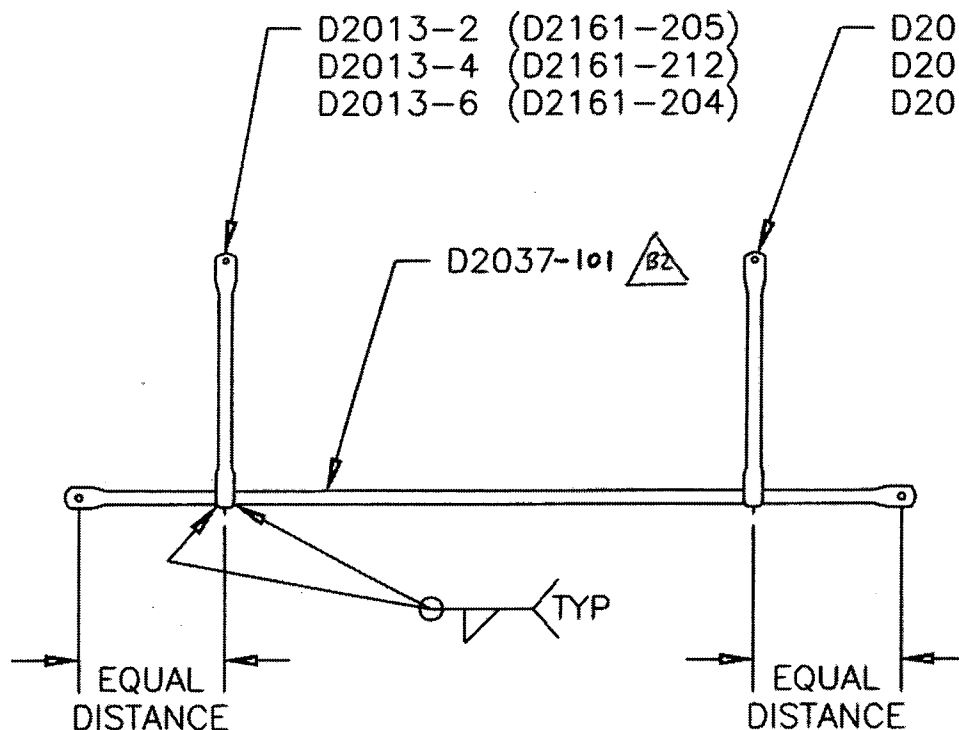


WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					



PLACE SHORTER ARM
ON SIDE OF JIG DT8065
LABELED FWD (TYP)

D2037-101 (B2)
WELD FLAT
END PARALLEL TO
THE SHORT ARM

DETAIL OF D2161-204
DETAIL OF D2161-205
DETAIL OF D2161-212

NOTE: WELD ASSEMBLY
USING JIG DT8065

FINISH: ~~POWDER COAT ASSEMBLY BLACK~~
~~CRINKLE (4.3.5.3) PER DART QSI 005 4.3~~
POWDER COAT BLACK SANDTEX (4.3.5.7) PER
DART QSI 005 4.3 (B1)

Sub. Copy
Rev. 1
134396
15-07-09



DESIGN	JB	DRAWN BY	DART AEROSPACE LTD HAMKESBURY, ONTARIO, CANADA
CHECKED	JB	APPROVED	REV. B
DATE	99.06.07	TITLE	SHEET 1 OF 1
		MIRROR BRACKET	SCALE
		NEW ISSUE	NTS
		REDRAWN FOR CLARITY ADDED -204/-205/-212 DESIGNATIONS	
		CHANGE FINISH	
		D2037-101 W	

RELEASED
134396
99.06.10

REFERENCE ONLY

DAS
28
9-89

4.0 PARTS LIST

Qty 562 -041	Qty 563 -041	Qty 580 -041	Part Number	Description
X			D204-562-041	DUAL MIRROR INSTALLATION
	X		D205-563-041	DUAL MIRROR INSTALLATION
		X	D212-580-041	DUAL MIRROR INSTALLATION
2	2	2	D3439-101	MIRROR (WAS D2011-103)
1			D2161-204	MIRROR BRACKET
	<i>WZ</i>		D2161-205	MIRROR BRACKET
		1	D2161-212	MIRROR BRACKET
*2	*2	*2	D3015-3	LOCKNUT
*2	*2	*2	AN960JD516	WASHER
		8	MS20426AD3-4	RIVET, COUNTERSUNK
		4	D4164-041	NUT PLATE ASSEMBLY
4	4	4	MS27039-1-08	SCREW

* PARTS ARE INCLUDED WITH D3439-101 MIRROR

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Revision: **B**

Date: 12.06.13